

## REMARKS

Reconsideration and allowance of this application, as amended, are respectfully requested.

With regard to the drawings, it is permitted to make a 'schematic' showing that is representative of actual structure. As shown in the drawings, reference numeral 2 can be thought of as referring to a single layer or multiple layers. If this is not satisfactory to the Examiner upon further reflection, an additional drawing will be provided.

Claims 1, 2 and 4-7 stand rejected under 35 USC 102(b) as being anticipated by Seiko (JP 4-310529). Claims 1-7 stand rejected under 35 USC 102(b) as being anticipated by Monji et al (US Patent 4,721,518). These grounds of rejection are respectfully traversed.

Claim 1 has been amended to include the limitations stated in claim 4 and to limit the "metal" that constitutes the diffusion preventive film to Nb or Mo. Claims 2-7 have been cancelled.

Claim 1 has been amended to incorporate limitations of original claim 4 and to limit the "metal" that constitutes the diffusion preventive film to Nb or Mo. The structures corresponding to amended claim 1 are described on page 7 line 19 to page 8 line 25 of the specification, and are found in specification described samples A and B.

The Seiko Epson (JP 4-310529) reference contains disclosures about a glass-forming mold and a heat-resistant protection film. It teaches that a non oxide-alloy film (3) is formed on a diffusion-protection film (2), which is formed on a cemented carbide alloy (1) (refer to the abstract).

In the Japanese-language patent application Kokai Publication (paragraph [0008], it is stated that the diffusion-protection film (2) and the non oxide-alloy film (3) are “a film containing at least one kind of metal selected from the group consisting of Pt, Ir, Pd, Rh, Os, Ru, Re, W and Ta”. In addition, as preferable examples of the kind of metal contained in the diffusion-protection film (2), Os, Ru and Re are given, and as a reason for that, the fact that the crystal structure differs from that of Co or Ni is stated.

As can be seen, Seiko Epson does not disclose the use of Nb or Mo as a diffusion-prevention film. It should also be noted that the crystal structure of Os, Ru and Re is the hexagonal close-packed (hcp) structure, whereas the crystal structure of Nb and Mo is the body-centered cubic (bcc) structure. In other words, Seiko Epson does not even contain a description that suggests the use of a single layer of Nb or Mo as a diffusion-protection film.

The Monji (US 4,721,518) reference contains disclosures about coating films formed on the surface of a mold for press-molding glass elements. It suggests that at least one intermediate layer (102, 101) should be formed on a base member (22) made of a super hard alloy or a cermet, and a noble metal layer (32) covers the at least one intermediate layer (102, 101) (see abstract).

The intermediate layer is made of a nitride, a carbide or an oxide or, alternatively, Cr or Ti (refer to col. 2 lines 9-20; claims 5 and 8). Cr or Ti, however, is not used when the intermediate layer comprises a single layer (see Table 1-5), but is used only when the intermediate layer comprises double layers (refer to col. 2, lines 17-20). Moreover, in most of the examples in which double layers are used (Tables 6-1 to 6-5), Cr or Ti is used together with a nitride, a carbide or an oxide. When only a metal or metals are used (second last data to fourth last data in Table 6-6), cobalt precipitation is relatively high, and only poor results can be obtained as compared with the results of other examples.

Monji does not disclose the use of Nb or Mo as an intermediate layer. Moreover, Monji does not even suggest the use of a single layer of Nb or Mo as an intermediate layer.

All outstanding matters having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

By: 

Glenn J. Perry  
Reg. No. 28,458  
Telephone: (703) 905-2161  
Direct Fax: (703) 738-2277

PILLSBURY WINTHROP LLP  
1600 Tysons Boulevard  
McLean, Virginia 22102  
Switchboard: (703) 905-2000  
Office fax: 703-905-2500